

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: STAUB ET AL. Examiner: UNKNOWN  
Serial No.: 10/784,540 Group Art Unit: 1751  
Filed: FEBRUARY 23, 2004 Docket: 163.1750US01  
Confirmation No.: 7749  
Title: METHODS FOR TREATING CIP EQUIPMENT AND EQUIPMENT FOR TREATING CIP EQUIPMENT

**CERTIFICATE UNDER 37 CFR 1.8:**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 22, 2004.

By: *Kristina A. Welch*

Name: *Kristina A. Welch*

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**23552**

PATENT TRADEMARK OFFICE

Sir:

We are transmitting herewith the attached:

- ☒ Transmittal Sheet in duplicate containing Certificate of Mailing
- ☒ Information Disclosure Statement, Form 1449, 148 Reference(s)
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MERCHANT & GOULD P.C.  
P.O. Box 2903, Minneapolis, MN 55402-0903  
612.332.5300

By: *Dennis R. Daley*

Name: Dennis R. Daley

Reg. No.: 34,994

DDaley:PLSkaw

S/N 10/784,540

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	STAUB ET AL.	Examiner:	UNKNOWN
Serial No.:	10/784,540	Group Art Unit:	1751
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Title:	METHODS FOR TREATING CIP EQUIPMENT AND EQUIPMENT FOR TREATING CIP EQUIPMENT		

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By:

Name:

*Kristine A. Warch*  
Kristine A. Warch

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(b))

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**23552**

PATENT TRADEMARK OFFICE

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted before the mailing date of a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

A copy of any foreign patent document or "Other Document" listed on the Form 1449 is enclosed, in accordance with 37 C.F.R. § 1.98(a)(2). Because this application was filed after June 30, 2003, copies of the U.S. Patents and U.S. patent publications listed on the enclosed Form 1449 are not provided.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.


Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

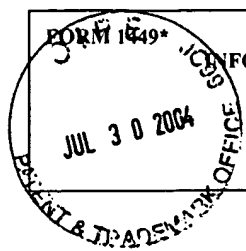
Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

Respectfully submitted,

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

Date: July 26, 2004

  
Dennis R. Daley  
Reg. No. 34,994  
DRD:PLSkaw



## INFORMATION DISCLOSURE STATEMENT

IN AN APPLICATION

(Use several sheets if necessary)

Docket Number:

163.1750US01

Application Number:

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Filing Date: 02/23/2004

Group Art Unit: 1751

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3,794,169	02/26/1974	Sisk et al.			
	3,802,390	04/09/1974	Blair et al.			
	3,840,402	10/08/1974	Tobin, III			
	3,912,624	10/14/1975	Jennings			
	3,992,301	11/16/1976	Shippey et al.			
	4,153,545	05/08/1979	Zwack et al.			
	4,222,871	09/16/1980	Lefevre			
	4,224,963	09/30/1980	Stahle			
	4,244,820	01/13/1981	Hauk et al.			
	4,299,121	11/10/1981	Asayama et al.			
	4,409,088	10/11/1983	Kanno et al.			
	4,482,514	11/13/1984	Schindler et al.			
	4,624,760	11/25/1986	Pottinger et al.			
	4,740,308	04/26/1988	Fremont et al.			
	4,792,401	12/20/1988	Truex et al.			
	4,801,375	01/31/1989	Padilla			
	4,871,683	10/03/1989	Harris et al.			
	4,923,609	05/08/1990	Jardine			
	4,943,374	07/24/1990	Heininger et al.			
	5,028,329	07/02/1991	Drioli et al.			
	5,039,324	08/13/1991	Goldberg			
	5,147,309	09/15/1992	Hemmerich et al.			
	5,169,412	12/08/1992	Prasad et al.			
	5,171,446	12/15/1992	Shen			
	5,221,477	06/22/1993	Melcher et al.			
	5,242,046	09/07/1993	Bailey			

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	5,395,429	03/07/1995	Sutsko et al.			
	5,456,843	10/10/1995	Koenhen			
	5,560,828	10/01/1996	Wenten et al.			
	5,605,628	02/25/1997	Davidson et al.			
	5,690,830	11/25/1997	Ohtani et al.			
	5,801,051	09/01/1998	Kiefer et al.			
	6,004,374	12/21/1999	Rao et al.			
	6,027,572	02/22/2000	Labib et al.			
	6,071,356	07/06/2000	Olsen			
	6,112,908	09/05/2000	Michaels			
	6,158,721	12/12/2000	Katou, H. et al.			
	6,161,250	12/19/2000	Young et al.			
	6,174,351	01/16/2001	McDowell et al.			
	6,197,203	03/06/2001	Ishida et al.			
	6,197,739 B1	03/06/2001	Oakes et al.			
	6,214,231	04/10/2001	Cote et al.			
	6,261,457 B1	07/17/2001	Wenthold et al.			
	6,280,626	08/28/2001	Miyashita et al.			
	6,288,222	09/11/2001	Roth et al.			
	6,326,340 B1	12/04/2001	Labib et al.			
	6,351,864	03/05/2002	Karafa et al.			
	6,355,173 B1	03/12/2002	den Bieman et al.			
	6,387,189 B1	05/14/2002	Gröschl et al.			
	6,402,956	06/11/2002	Andou et al.			
	2002/0112743 A1	08/22/2002	Tabani et al.			
	6,454,871 B1	09/24/2002	Labib et al.			
	6,485,762	11/26/2002	Rizvi et al.			
	6,499,606	12/31/2002	Grangeon et al.			
	6,515,115	02/04/2003	Kwant et al.			

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	6,524,481	02/25/2003	Zha et al.			
	6,619,302	09/16/2003	Labib et al.			
	2004/0007255 A1	01/15/2004	Labib et al.			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	8934601	11/16/1989	AU			abstract only	
	1221648	07/07/1999	CN			abstract only	
	2818127 A1	11/16/1978	DE			abstract only	
	3818919	12/14/1989	DE			abstract only	
	4101045	08/08/1991	DE			abstract only	
	4109732	10/01/1992	DE			abstract only	
	4226673	02/17/1994	DE			abstract only	
	19724172 A1	12/10/1998	DE			abstract only	
	19730441 A1	01/21/1999	DE			abstract only	
	10004863 A1	02/15/2001	DE			abstract only	
	19920269 A1	03/08/2001	DE			abstract only	
	301597	02/01/1989	EP			abstract only	
	0 490 117 A1	06/17/1992	EP			X	
	0 160 014 B1	01/07/1993	EP				
	526372 A1	02/03/1993	EP			abstract only	
	645174 A1	03/29/1995	EP			abstract only	
	0 970 922 A2	01/12/2000	EP				
	2707520 A1	01/20/1995	FR			abstract only	
	2727787 A1	06/07/1996	FR			abstract only	
	51071880 A2	06/22/1976	JP			abstract only	
	52058078 A2	05/13/1977	JP			abstract only	
	53108882	09/22/1978	JP			abstract only	
	54067574	05/31/1979	JP			abstract only	

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	55049887 B4	12/15/1980	JP			abstract only	
	56024006	03/07/1981	JP			abstract only	
	56015924 B4	04/13/1981	JP			abstract only	
	61153104 A2	07/11/1986	JP			abstract only	
	61192309 A2	08/26/1986	JP			abstract only	
	63104610 A2	05/10/1988	JP			abstract only	
	63126513 A2	05/30/1988	JP			abstract only	
	63147506	06/20/1988	JP			abstract only	
	01104309	04/21/1989	JP			abstract only	
	01262903	10/19/1989	JP			abstract only	
	01262904	10/19/1989	JP			abstract only	
	02183749	07/18/1990	JP			abstract only	
	03042018	02/22/1991	JP			abstract only	
	04317726	11/09/1992	JP			abstract only	
	05277345	10/26/1993	JP			abstract only	
	06023246	02/01/1994	JP			abstract only	
	07000770 A2	01/06/1995	JP			abstract only	
	07246320 A2	09/26/1995	JP			abstract only	
	07313851 A2	12/05/1995	JP			abstract only	
	09108670 A2	04/28/1997	JP			abstract only	
	09117647	05/06/1997	JP			abstract only	
	09262442 A2	10/07/1997	JP			abstract only	
	10052377 A2	02/24/1998	JP			abstract only	
	10057957 A2	03/03/1998	JP			abstract only	
	10085562 A2	04/07/1998	JP			abstract only	
	11057415	03/02/1999	JP			abstract only	
	11077042 A2	03/23/1999	JP			abstract only	
	11104636 A2	04/20/1999	JP			abstract only	
	11165186 A2	06/22/1999	JP			abstract only	

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	11169684	06/29/1999	JP			abstract only	
	11197685 A2	07/27/1999	JP			abstract only	
	11256193	09/21/1999	JP			abstract only	
	11309346 A2	11/09/1999	JP			abstract only	
	2000000598	01/07/2000	JP			abstract only	
	2000051670 A2	02/22/2000	JP			abstract only	
	2000061273	02/29/2000	JP			abstract only	
	2000325758 A2	11/28/2000	JP			abstract only	
	2001038164 A2	02/13/2001	JP			abstract only	
	2001079366	03/27/2001	JP			abstract only	
	2001104760	04/17/2001	JP			abstract only	
	2001145676	05/29/2001	JP			abstract only	
	2001205055	07/31/2001	JP			abstract only	
	2001259384	09/25/2001	JP			abstract only	
	2001018168	03/05/2001	KR			abstract only	
	WO 9517526 A1	06/29/1995	PCT			abstract only	
	WO 9733832 A1	09/18/1997	PCT			abstract only	
	WO 2000018498 A1	04/06/2000	PCT			abstract only	
	2033579	04/20/1995	RU			abstract only	
	2046080	10/20/1995	RU			abstract only	
	743691	07/02/1980	SU			abstract only	
	948386	08/07/1982	SU			abstract only	
	1350434	11/07/1987	SU			abstract only	
	1532099	12/30/1989	SU			abstract only	
	1701358 A1	12/30/1991	SU			abstract only	

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

	"AirFlush® processing: Minimise chemicals by AIR-enhanced membrane cleaning," <a href="http://www.xflow.nl/english/concepten/airflush.html">http://www.xflow.nl/english/concepten/airflush.html</a> , 3 pages (Date Printed February 15, 2002)
	Allen, V. et al., "Test program for physical cleaning and fouling prevention in reverse osmosis systems," <i>Report</i> , CEL-CR-78.010, Order AD-A055624 (1978) (1 page abstract)

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	Balek, W., "Overview of Food Safety Regulation in the United States," <i>International Sanitary Supply Association</i> , pp. 1-8 (March 30, 2001)
	Bellara, S. et al., "Gas Sparging to enhance permeate flux in ultrafiltration using hollow fibre membranes," <i>Journal of Membrane Science</i> , Vol. 121, No. 2, pp. 175-184 (December 11, 1996) (1 page abstract)
	Bellara, S. et al., "Flux enhancement in hollow fiber membrane systems," <i>ICHEME Res. Event, Eur. Conf. Young Res. Chem. Eng., 2nd</i> , Vol. 1, pp. 310-312 (1996) (1 page abstract)
	Bodzek, M., "Membrane techniques in air cleaning," <i>Pol. J. Environ. Stud.</i> , Vol. 9, No. 1, pp. 1-12 (2000) (1 page abstract)
	Bouhabila, E. et al., "Microfiltration of activated sludge using submerged membrane with air bubbling (application to wastewater treatment)," <i>Desalination</i> , Vol. 118, Nos. 1-3, pp. 315-322 (1998) (1 page abstract)
	Bouhabila, E. et al., "Fouling characterization in membrane bioreactors," <i>Separation and Purification Technology</i> , Vol. 22 and 23, Nos. 1-3, pp. 123-132 (2001) (1 page abstract)
	Bourcier, W. et al., "Pretreatment of oil field and mine waste waters for reverse osmosis," <i>Environ. Sci. Res.</i> , Vol. 52, pp. 509-519 (1996) (1 page abstract)
	Cabassud, C. et al., "Flux enhancement by a tangential gas flow in ultrafiltration hollow fibers for drinking water production," <i>Proc.-World Filtr. Congr., 7th</i> , Vol. 2, pp. 496-500 (1996) (1 page abstract)
	Cabassud, C. et al., "How slug flow can improve ultrafiltration flux in organic hollow fibres," <i>Journal of Membrane Science</i> , Vol. 128, pp. 93-101 (1997)
	Cabassud, C. et al., "Air sparging in ultrafiltration hollow fibers: relationship between flux enhancement, cake characteristics and hydrodynamic parameters," <i>Journal of Membrane Science</i> , Vol. 181, No. 1, pp. 57-69 (January 15, 2001) (1 page abstract)
	Chakma, A., "Separation of CO <sub>2</sub> and SO <sub>2</sub> from flue gas streams by liquid membranes," <i>Energy Convers. Manage.</i> , Vol. 36, Nos. 6-9, pp. 405-410 (1995) (1 page abstract)
	Chang, S. et al., "Characteristics of microfiltration of Suspensions with inter-fiber two-phase flow," <i>Journal of Chemical Technology &amp; Biotechnology</i> , Vol. 75, No. 7, pp. 533-540 (2000) (1 page abstract)
	Cheng, T. et al., "Effects of gas slugs and inclination angle on the ultrafiltration flux in tubular membrane module," <i>J. Membr. Sci.</i> , Vol. 158, Nos. 1-2, pp. 223-234 (1999) (1 page abstract)
	Cheng, T., "Influence of inclination on gas-sparged crossflow ultrafiltration through an inorganic tubular membrane," <i>Journal of Membrane Science</i> , Vol. 196, No. 1, pp. 103-110 (2002) (1 page abstract)
	Chevyan, M., "Introduction. Definition and Classification of Membrane Separation Processes," <i>Ultrafiltration and Microfiltration Handbook</i> , 22 pages (1998)
	Cui, Z. et al., "Flux enhancements with gas sparging in downwards crossflow ultrafiltration: performance and mechanism," <i>J. Membr. Sci.</i> , Vol. 117, Nos. 1-2, pp. 109-116 (1996) (1 page abstract)
	Cui, Z. et al., "Airlift crossflow membrane filtration - a feasibility study with dextran ultrafiltration," <i>Journal of Membrane Science</i> , Vol. 128, No. 1, pp. 83-91 (May 28, 1997) (1 page abstract)
	Cui, Z. et al., "Water Treatment with Membranes and Membrane Bioreactors," <a href="http://www.eng.ox.ac.uk/World/Research/Summary/B-Biotech.html">http://www.eng.ox.ac.uk/World/Research/Summary/B-Biotech.html</a> , 1 page (May 17, 2002)

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	"Desal™ Membrane Products, Food & Dairy Sanitary Ultrafiltration PES - 10,000 MWCO," <i>Osmonics</i> , 2 pages (Date Unknown)
	"Desal® Membrane Products, Dairy Processing Sanitary Ultrafiltration PES - 10,000 MWCO," <a href="http://www.osmonics.com/Literature/Literature.asp?G=31">http://www.osmonics.com/Literature/Literature.asp?G=31</a> , 2 pages (Date Printed March 12, 2003)
	Duin, O. et al., "Direct nanofiltration or ultrafiltration of WWTP effluent?," <i>Proceedings of the Conference on Membranes in Drinking and Industrial Water Production</i> , Vol. 2, pages 105-112 (October 2000)
	Dunham, S. et al., "Membrane Cleaning Under the Microscope Successful Cleaning Means Knowing the Foulant," <i>Water Technology</i> , 4 pages (September 1995)
	Eltron Research, Inc., "In Situ Electrolytic System for Ultrafiltration Membrane Cleaning," (1 page abstract)
	Fazel, M. et al., "A statistical review of 150 membrane autopsies," 7 pages (Date Unknown)
	Gotham, S. et al., "Model Studies of Food Fouling," pp. 1-13 (Date Unknown)
	Ghosh, R. et al., "Mass transfer in gas-sparged ultrafiltration: upward slug flow in tubular membranes," <i>Journal of Membrane Science</i> , Vol. 162, Nos. 1-2, pp. 91-102 (September 1, 1999) (1 page abstract)
	Hong, S. et al., "Assessing pathogen removal efficiency of microfiltration by monitoring membrane integrity," <i>Water Science &amp; Technology: Water Supply</i> , Vol. 1, No. 4, pp. 43-48 (2001) (1 page abstract)
	Huang, J. et al., "Pilot-plant study of a high recovery membrane filtration process for drinking water treatment," <i>Water Science and Technology</i> , Vol. 41, Nos. 10-11, pp. 77-84 (2000) (1 page abstract)
	Imasaka, T. et al., "Application of gas-liquid two-phase cross-flow filtration to pilot-scale methane fermentation," <i>Drying Technol.</i> , Vol. 11, No. 4, pp. 769-785 (1993) (1 page abstract)
	Jacangelo, J. et al., "The membrane treatment," <i>Civil Engineering</i> , 7 pages (September 1998) <a href="http://www.pubs.asce.org/ceonline/sepfeat.html">http://www.pubs.asce.org/ceonline/sepfeat.html</a>
	Jenkins, S. et al., "Fluorometric analysis of the uniformity of deposition on cassette membrane filters," <i>Appl. Occup. Environ. Hyg.</i> , Vol. 7, No. 10, pp. 665-671 (1992) (1 page abstract)
	Kennedy, M. et al., "Improving the performance of dead-end ultrafiltration systems: comparing air and water flushing," <i>Water Science and Technology: Water Supply</i> , Vol. 1, No. 5/6, pp. 97-106 (2001)
	Klein, G. et al., "Fouling in Membrane Apparatus: The Mechanisms of Particle Deposition," <i>Trans IChemE</i> , Vol. 77, Part C, pp. 119-126 (June 1999)
	Laborie, S. et al., "Flux enhancement by a continuous tangential gas flow in ultrafiltration hollow fibers for drinking water production: effects of slug flow on cake structure," <i>Filtr. Sep.</i> , Vol. 34, No. 8, pp. 887-891 (1997) (1 page abstract)
	Laborie, S. et al., "Fouling control by air sparging inside hollowing fiber membranes - effects on energy consumption," <i>Desalination</i> , Vol. 118, No. 1-3, pp. 189-196 (1998) (1 page abstract)
	Laborie, S. et al., "Characterisation of gas-liquid two-phase flow inside capillaries," <i>Chemical Engineering Science</i> , Vol. 54, No. 23, pp. 5723-5735 (December 1999) (1 page abstract)

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	Laitinen, N. et al., "Effect of filtration conditions and backflushing on ceramic membrane ultrafiltration of board industry wastewaters," <i>Separation and Purification Technology</i> , Vol. 24, Nos. 1-2, pp. 319-328 (2001) (1 page abstract)
	Makardij, A. et al., "Microfiltration and ultrafiltration of milk: Some aspects of fouling and cleaning," <i>Trans IChemE</i> , Vol. 77, Part C, pp. 107-113 (June 1999)
	"Market Engineering Measurement Analysis of the Total Ultrafiltration, Nanofiltration, and Reverse Osmosis Membrane Elements Market," <i>U.S. Ultrafiltration, Nanofiltration, and Reverse Osmosis Filter Element Markets 5318-15</i> , pp. 3-1-3-6 (2000)
	Mercier, M. et al., "How slug flow can enhance the ultrafiltration flux in mineral tubular membranes," <i>Journal of Membrane Science</i> , Vol. 128, pp. 103-113 (1997)
	Mercier, M. et al., "Membrane bioreactors in fermentation process - two-phase flow may be a solution to enhance crossflow filtration flux," <i>BHR Group Conf. Ser. Publ.</i> , Vol. 25, pp. 331-348 (1997) (1 page abstract)
	Mercier, M. et al., "Yeast suspension filtration: flux enhancement using an upward gas/liquid slug flow - application to continuous alcoholic fermentation with cell recycle," <i>Biotechnol. Bioeng.</i> , Vol. 58, No. 1, pp. 47-57 (1998) (1 page abstract)
	Mercier-Bonin, M. et al., "Influence of a gas/liquid two-phase flow on the ultrafiltration and microfiltration performances: case of a ceramic flat sheet membrane," <i>Journal of Membrane Science</i> , Vol. 180, No. 1, pp. 93-102 (2000) (1 page abstract)
	Mercier-Bonin, M. et al., "Hydrodynamics of slug flow applied to cross-flow filtration in narrow tubes," <i>AIChE J.</i> Vol. 46, No. 3, pp. 476-488 (2000) (1 page abstract)
	Mercier-Bonin, M. et al., "How unsteady filtration conditions can improve the process efficiency during cell cultures in membrane bioreactors," <i>Separation and Purification Technology</i> , Vol. 22 and 23, no. 1-3, pp. 601-615 (2001) (1 page abstract)
	Mikulasek, P. et al., "The use of flux enhancement methods for high flux cross-flow membrane microfiltration systems," <i>Chemical and Biochemical Engineering Quarterly</i> , Vol. 14, No. 4, pp. 117-123 (2000) (1 page abstract)
	Mikulasek, P. et al., "Flux enhancement by gas-liquid two-phase flow for crossflow microfiltration in a tubular ceramic membrane," <i>J. Filtr. Soc.</i> , Vol. 2, No. 1, pp. 20-26 (2001) (1 page abstract)
	Nordman-Montelius, M. et al., "Analyses of Raw Milk Deposits on Non-Heated Polymer Surfaces," pp. 276-285 (Date Unknown)
	Paul, D. et al., "Membrane separation processes for clean production," <i>Environ. Prog.</i> , Vol. 17, No. 3, pp. 137-141 (1998) (1 page abstract)
	Paulson, D., "Membranes, the Finest Filtration," <i>Filtration News</i> , <a href="http://www.osmonics.com/products/Page698.htm">http://www.osmonics.com/products/Page698.htm</a> , 9 pages (July 1, 1995)
	Princeton Trade & Technology Inc., "Cleaners for Wastewater Ultrafiltration Membranes," (1 page abstract)
	Rogut, J., "Design and development of high performance gas-liquid membrane contactors for SO <sub>2</sub> and NO <sub>x</sub> removal from flue gases," <i>Proc. Int. Tech. Conf. Coal Util. Fuel Syst.</i> , Vol. 21, pp. 87-98 (1996) (1 page abstract)

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<b>FORM 1449*</b> <b>INFORMATION DISCLOSURE STATEMENT</b>  <b>IN AN APPLICATION</b>  (Use several sheets if necessary)	Docket Number: 163.1750US01	Application Number: 10/784,540
	Applicant: STAUB ET AL.	
	Filing Date: 02/23/2004	Group Art Unit: 1751

		Roorda, J. et al., "Understanding membrane fouling in ultrafiltration of WWTP-effluent," <i>Water Science and Technology</i> , Vol. 41, No. 10-11, pp. 345-353 (2000)
		Ruiz, J. et al., "Solid aerosol removal using ceramic filters," <i>Separation and Purification Technology</i> , Vol. 19, No. 3, pp. 221-227 (July 1, 2000) (1 page abstract)
		Sandu, C. et al., "Fouling of Heating Surfaces - Chemical Reaction Fouling Due to Milk," pp. 122-167 (Date Unknown)
		Scott, K. et al., "Intensified membrane filtration with corrugated membranes," <i>Journal of Membrane Science</i> , Vol. 173, No. 1, pp. 1-16 (2000) (1 page abstract)
		Serra, C. et al., "Use of air sparging to improve backwash efficiency in hollow-fiber modules," <i>Journal of Membrane Science</i> , Vol. 161, No. 1-2, pp. 95-113 (2002) (1 page abstract)
		Shimizu, Y. et al., "Filtration characteristics of hollow fiber microfiltration membranes used in membrane bioreactor for domestic wastewater treatment," <i>Water Res.</i> , Vol. 30, No. 10, pp. 2385-2392 (1996) (1 page abstract)
		"Standard Test Methods for Pore Size Characteristics of Membrane Filters by Bubble Point and Mean Flow Pore Test," pp. 1-7 (Date Unknown)
		"The Environmental Technology Centre," <a href="http://www.nottingham.ac.uk/~enzetc/technology/cmf.htm">http://www.nottingham.ac.uk/~enzetc/technology/cmf.htm</a> , 2 pages (Date Printed March 21, 2003)
		"The Environmental Technology Verification Program. ETV Joint Verification Statement," <i>U.S. Environmental Protection Agency</i> , pp. VS-i-VS-vi (September 2000)
		"U-Tube Reactor and Ultrafiltration Membrane," <i>Water Pollution Control Technology in Japan</i> , Nightoil Treatment, 3 pages (Date Printed June 21, 2002) <a href="http://nett21.unep.or.jp/CTT_DATA/WATER/WATER_3/html/Water-165.html">http://nett21.unep.or.jp/CTT_DATA/WATER/WATER_3/html/Water-165.html</a>
		Väisänen, P. et al., "Treatment of UF membranes with simple and formulated cleaning agents," <i>Trans IChemE</i> , Vol. 80, Part C, pp. 98-108 (June 2002)
		Verberk, J. et al., "Combined air-water flush in dead-end ultrafiltration," <i>Proceedings of the Conference on Membranes in Drinking and Industrial Water Production</i> , Vol. 2, pp. 655-663 (October 2000)
		Verberk, J. et al., "Combined air-water flush in dead-end ultrafiltration," <i>Water Science and Technology: Water Supply</i> , Vol. 1, No. 5/6, pp. 393-402 (2001)
		Verberk, J., "Air-water cleaning for micro and ultrafiltration," <a href="http://www.gezondheidstechniek.tudelft.nl/verberk.htm">http://www.gezondheidstechniek.tudelft.nl/verberk.htm</a> , 4 pages (April 16, 2002)
		Verberk, J. et al., "Hydraulic distribution of water and air over a membrane module using AirFlush®," <i>Water Science and Technology: Water Supply</i> , Vol. 2, No. 2, pp. 297-304 (2002)
		Verberk, J. et al., "Combined air-water flush in dead-end ultrafiltration," <i>TU Delft</i> , 1 page (Date Unknown)
		Wang, Z. et al., "Characteristics of dextran and BSA fouling of PS membrane and its microscopic mechanism," <i>Shuichuli Jishu</i> , Vol. 26, No. 5, pp. 273-276 (2000) (1 page abstract)

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